November 2, 2012

Bill Grant, Deputy Commissioner
Minnesota Department of Commerce
Division of Energy Resources (DER)
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

Dear Deputy Commissioner Grant,

The Minnesota Renewable Energy Society recognizes the need for updating and reform of the pioneering 1983 "net-metering" law (MN Statute 216B.164) limitations and urges swift action to implement a solution. The 40kW limit on retail rate net-metering might have seemed sensible in 1983; however, it is inappropriately restricting desirable growth of clean and renewable energy and not providing appropriate incentives for continued deployment and deployment of commercial and industrial scale solar photovoltaic (PV) systems. More specifically, commercial and industrial entities and third party investors are not fairly compensated and incentivized for installing solar photovoltaic (PV) systems, because of the mismatch in peak demand billing methods and the benefits of clean solar PV production, and they are unfairly limited by the 40 kW net-metering cap.

Following stakeholder meetings, the Department of Energy Resources (DER) found from Distributed Generation (DG) stakeholder meetings: "There is a significant knowledge gap of values and costs [of DG];…" and "It's important to accurately identify and quantify the impacts of DG (costs, values, benefits) of DG." In addition, DER found that "Many parts of the country are moving forward with improved DG policies in order to tap this vast [economic] opportunity." Furthermore, net-metering is an important and appropriate incentive to fairly compensate stakeholders for installing clean and renewable energy solutions; however, as you point out, "net metering generation is less than 0.03% of retail electricity sales in Minnesota (i.e. less than three one hundredths of one percent)." Therefore, it's not enough of an incentive to deploy more DG quickly and fairly.

If Minnesota wants to avoid falling behind other States, reduce its dependence on imported fossil fuels and capture the economic opportunity that solar, wind, and other renewable energy technologies present to us, it is important that the DG stakeholders find a way to capture a significant share of one of the fastest growing markets in the world: distributed solar energy generation. If we don't do it and do it very soon, other states and nations will grab the opportunity before us, and Minnesota will fall farther behind in the race to grab a piece of the economic action.

In a recent press announcement the Solar Energy Industry Association (SEIA) said, "Today, solar energy is one of the fastest growing energy technologies in America, employing more than 100,000 Americans who work at more than 5,600 companies located in every state. Cumulative U.S. solar electric capacity now totals more than 5,700 megawatts, enough to power nearly a million American homes. Second quarter growth in 2012 was more than double that of 2011." We need to pursue this economic development and growth opportunity; the alternative is to allow Minnesota to slip into economic decline, continue to import and burn more dirty fossil fuels instead, and our biggest barriers and problems are the current policy issues and limitations around the net-metering law.

At the October 11th DER stakeholder DG workshop, Mike Bull (Xcel Energy), Mark Rathbun (Great River Energy), and Doug Larson (Dakota Electric) all testified and complained about the cost shifting, revenue losses, and unfair

return on investments that the current net-metering law causes for them all. Part of the complexity of the problem electric utilities face is that we as a State do not give the electric utilities proper incentives or methods that would internalize all the cost and account for cost shifting of and the ill effects of dirty energy on the environment, climate change contribution, and human health issues. However, focusing on an interesting solution that Lisa Schwartz of Regulatory Assistance Project (RAP) suggested at the October 11th DG Workshop, which she called "Dual Metering" or "Gross Metering," and also Mike Bull of Xcel Energy suggested, which he called "Buy-All / Sell-All," we have a way forward that could work for us all. As a significant source of DG, MRES believes that the Austin Energy model of valuing solar energy has significant merit and was illustrated with a cost and value calculator in the publication: "DESIGNING AUSTIN ENERGY'S SOLAR TARIFF USING A DISTRIBUTED PV VALUE CALCULATOR" (http://www.cleanpower.com/wp-content/uploads/090_DesigningAustinEnergysSolarTariff.pdf).

Following a model like the Austin Energy *Distributed PV calculator* and giving appropriate value to solar energy above the general service commercial electric rates would advance DG deployment in Minnesota and apparently address the cost shifting, revenue loss, and unfair profit issues that the electrical utilities are complaining about and help capture the economic opportunity that solar PV presents. In addition, as Nathan Franzen of Westwood Professional Services expressed, at the last DG workshop, "Buy-All / Sell-All" is an interesting proposed solution. However, adopting a solution like "By-All / Sell-All" is only useful to solve the problems that commercial and industrial solar PV installations have with demand (kilowatt) billing, if we actually give a higher value to clean solar energy than the relatively dirty energy that all utilities in Minnesota now produce. The Austin Energy *Distributed PV calculator* and policy model does give an appropriately higher value to solar energy and could be quickly implemented as a means of giving proper incentives to clean-up the grid and compensate for solar PV DG equitably and treat all stakeholders fairly. Furthermore, this proposed solution is only useful if we can implement it quickly, as in the next 6 months. If it takes 2 or 3 years to implement net-metering reform, Minnesota will have lost the economic development opportunity that solar energy presents to us and the problems will persist.

The cost and value of solar PV distributed generation has been changing quickly and as it changes, the utility buy price in a "Buy-All / Sell-All" agreement must have a mechanism to change. Austin Energy *Distributed PV calculator* provides a means for it. In addition, to internalize otherwise externalized costs and align incentives for Xcel and other Minnesota utilities, the 10% Solar Energy Standard (SES), such as proposed by the Solar Works for Minnesota Coalition, will provide a cap for utilities buy quantity from the market or for their own generation. Therefore, should either the electrical utility reach 10% of their generation capacity with utility owned PV equipment, or should the utility reach 10% of energy purchased through "Buy-All / Sell-All" agreements or other sources, or a combination of both owned and bought solar energy, then under a 10% SES, they should not be required to take on any further "Buy-All / Sell-All" agreement for distributed solar energy generation. However, a utility could certainly have the option, at their choice, to have 100% solar PV generation too.

Including a 10% SES with a "Buy-All / Sell-All" agreement would provide private and third-party investors an attractive and predictable rate of return and so attract both local, out-of-state, and foreign investment in clean Minnesota infrastructure. Together it provides an opportunity to participate, in a significant way, in the fastest growing market in the world, which is a significant economic growth opportunity for the entire State of Minnesota using clean Minnesota solar energy resources rather than imported and dirty fossil fuel resources.

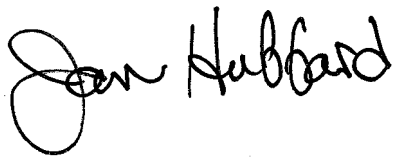
We see a good and workable solution to all DG stakeholder issues that the current net-metering law presents by keeping the current net-metering DG rates in place for retail customers and adding a choice for commercial and industrial electric utility ratepayers that would be similar to what Lisa Schwartz called "Dual Metering" or "Gross

Metering" and Mike Bull called "Buy-All / Sell-All," and with it remove the 40kW cap and instead allow the DG size (kW) limit to rise to the size of the ratepayer premise load with a "Buy-All / Sell-All" agreement.

However, a successful "Buy-All / Sell-All" solution depends on a fair, equitable, and predictable price for solar PV distributed generation, which can be quickly implemented without further protracted debate. Providing a utility clean energy incentive to all Minnesota ratepayers removes a disincentive to sell less energy and avoids cost shifting, because it's clean energy for everyone, addresses environmental issues, and would provide for many more good and sustainable jobs for Minnesota with a fair market price and value, adjusted periodically, with a solar energy pricing model similar to the Austin Energy *Distributed PV calculator.* Furthermore, combining a 10% SES with a "Buy-All / Sell-All" model would align the utilities interests with investor and public interests for Minnesota clean energy and the economic opportunity to participate in the fastest growing market in the world.

Thank you for the opportunity to comment and participate in the DG workshops.

Sincerely,



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